pr.21632 Tornado (project)

DATA AS OF 2013 (standard replenishment)
pr.21632 "Tornado "

Export version of the small artillery ship pr.21360 / river-sea class corvette / series of ships. Developed by Zelenodolsk Design Bureau, chief designer - Kushnir Ya.E. According to information from the website of the United Shipbuilding Corporation, production of the ships is expected at Ship Repair Plant No. 178 (Vladivostok). The ships are expected to be equipped with weapons systems in an export version, variations in weapons systems for a specific customer are possible. Ship configuration options for the project are given in brackets.

One of the layout options of the Project 21632 Tornado small missile ship, drawing 2013 (http://www.ejercitos.org).

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VA-111 Shkval M-5
hi-res
mpashnev 2020-08-13 16:26

VA-111 Shkval M-5
arma37@tank7 Wrote:From which book? t-95yes from the same... in neighboring topics the title was written by Sierra
DIMMI 2016-10-07 12:49

VA-111 Shkval M-5
From which book? t-95
arma37@tank7 2016-10-06 21:36

VA-111 Shkval M-5

The first and second layout options of the Project 21632 Tornado corvette (http://www.oborona.ru)

Author: DIMMI Created: 02.09.2010 20:29:50 Comments: 2 READ THE FULL ARTICLE

Project of a promising aircraft carrier

DATA FOR 2013 (standard update)
Project of the prospective aircraft carrier of the Russian Navy
- project NPKB MVMS-2007
- project NPKB 2012
- project KGNC MVMS-2013

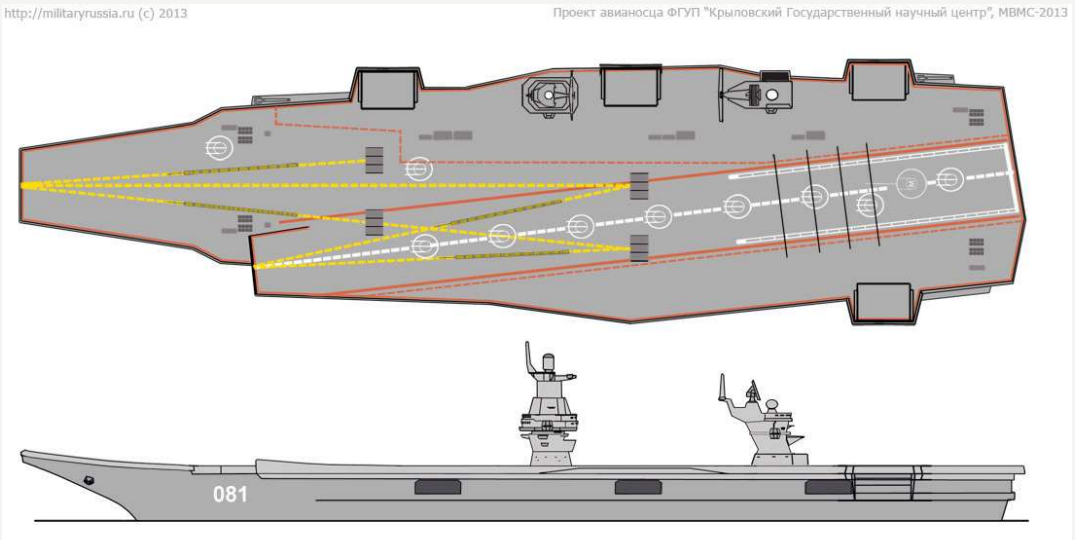
★★★

A promising aircraft carrier of the Russian Navy. According to media reports and a statement by the Commander-in-Chief of the Russian Navy V. Kuroyedov, preliminary design work on the aircraft carrier began in 2005. In the same year of 2005, it was planned to begin construction of the ship after 2010. According to the information available at that time, the design was carried out by Nevskoye PKB (St. Petersburg) jointly with the Krylov Central Research Institute. In 2005, it was also announced that the new aircraft carrier would join the Northern Fleet as early as 2016-2017, and the construction of the ships was supposed to be carried out at PO Sevmash in Severodvinsk.

In May 2007, judging by everything, the technical specifications for the new aircraft carrier project were completed - the performance characteristics of the new ship were considered at a meeting of the heads of various Naval Research Institutes, enterprises of the Ministry of Shipbuilding Industry and the leadership of the Russian Navy in St. Petersburg. The Navy's need for 3-4 ships of this class is stated. On April 4, 2008, the Commander-in-Chief of the Russian Navy V. Vysotsky, when presenting the Navy development plan until 2050, announced the planned deployment of 5-6 aircraft carrier groups by 2017 with the start of construction of aircraft carriers after 2012.

On June 25, 2009, the same Navy Commander-in-Chief stated that the creation of traditional aircraft carriers is already considered unpromising, and plans are to focus on the creation of "naval aviation complexes" ("MAS" - "naval aircraft carrier system"). The technical specifications for the new ship have probably been changed, and the possibility of building ships of the project at PO Sevmash in Severodvinsk or at the Baltic Shipyard in St. Petersburg has been announced. The media are discussing the construction of three ships for the Northern and Pacific Fleets. In the future, their number may be increased to 6.

At the end of February 2010, it was announced that the technical design of the prospective aircraft carrier would be completed by Nevskoye Design Bureau by the end of 2010. After which the development of technical documentation would begin. In 2010, the Commander-in-Chief of the Navy V. Vysotsky announced plans to launch the ship by 2020. On December 10, 2010, RIA Novosti, citing a source in the Russian Ministry of Defense, reported plans to build 4 aircraft carriers by 2020, but this message was later refuted by the Minister of Defense of the Russian Federation A. Serdyukov and on December 14, 2010, Deputy Prime Minister of the Russian Government S. Ivanov announced that the armament program for 2011-2020 does not provide for the construction of aircraft carriers.



Project of a promising aircraft carrier for the Russian Navy developed by the Federal State Unitary Enterprise "Krylov State Research Center", IMMS-2013 (c) August 2013, http://militaryrussia.ru , when copying a link is required.

An article for every occasion
Sierra 2016-10-06 19:51

VA-111 Shkval M-5
Slaanesh Wrote: although we may not need it, but India is interested) http://www.ca-news.org...
Artist 2014-09-13 04:12

VA-111 Shkval M-5
I accidentally saw an article on Wikipedia about the Dastan plant i Kyrgyzstan. This topic is nonsense
Artist 2014-09-13 03:06

VA-111 Shkval M-5
Vladimir Vladimirovich Wrote: Removed from service in the early 1990s (((This is a lie. Nothing...
Artist 2014-09-11 21:02

VA-111 Shkval M-5
although we may not need it, but India is interested)http://www.ca-news.org/news/725931
Slaanesh 2011-07-05 13:03

VA-111 Shkval M-5
Hmm, interesting, only surface targets are written. By the way. It's interesting, what is the epic...
Slaanesh 2011-07-05 13:01

VA-111 Shkval M-5
A small remark - a wonderful example of the German trace. A magnificent development of their ideas. :beer:
Sierra 2011-05-30 01:40

Model of a prospective aircraft carrier presented at the stand of the Federal State Unitary Enterprise "Krylov State Research Center" at the IMDS-2013 salon in St. Petersburg. July 4, 2013 (photo - http://flotprom.ru , processed).

A model of a variant of a prospective aircraft carrier in the office of the Commander-in-Chief of the Russian Navy, which was shown in a TV program on 10.11.2012 - see below, 2012 (http://www.air-defense.net/forum).

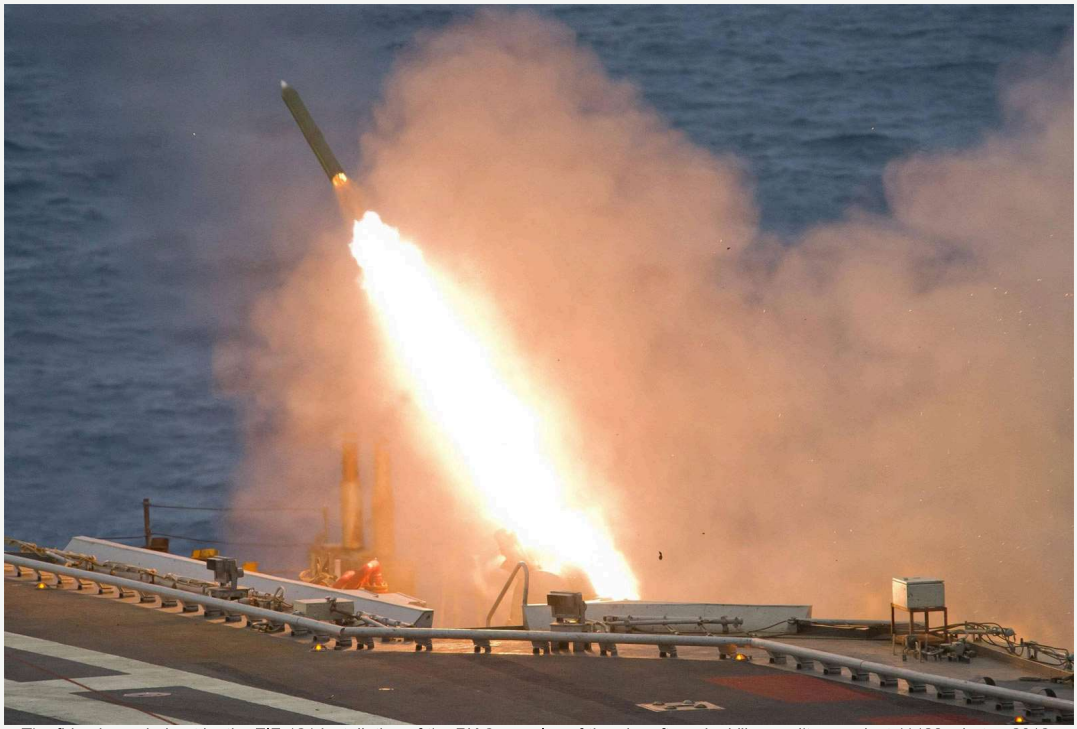
Sketch of the prospective aircraft carrier of Nevskoe Design Bureau from an advertising poster from the IMDS-2007 exhibition, St. Petersburg (http://www.militaryphotos.net)

Author: DIMMI Created: 29.06.2010 22:01:34 Comments: 131 READ THE FULL ARTICLE

140 mm PU PK-2 / ZIF-121 Tertia (KL-102)

DATA AS OF 2013 (standard replenishment)
PK-2 / KL-102 complex, ZIF-121 / RUPP-140 launcher, Tertsiya control system
PK-2M complex, ZIF-121-02 launcher, Smeta control system
★★★★

140 mm launcher for jamming system. Development was started by the USSR Council of Ministers Resolution No. 832-372 of July 21, 1959 in OKB-43 (design bureau index - KL-102). In January 1961, the KL-102 project was transferred to TsKB-34. A prototype of the launcher was built by Plant No. 7 and sent for factory testing on May 18, 1962. The draft technical design was ready by June 1962. Due to delays in finalizing the system, on November 20, 1963, the project was transferred to TsKB-7 (PO Arsenal) and the launcher was renamed ZIF-121 (ZIF is the name of TsKB-7 projects). Factory tests were completed in January 1964. State range tests were conducted from October 20, 1964 to December 27, 1965. Ship tests were conducted on the Project 1123 anti-submarine cruiser Moskva from August 1 to October 30, 1967. Simultaneously, ship tests were conducted on the Project 1134 missile cruiser Admiral Zozulya. The jamming system, designated PK-2, was accepted into service in 1969.



The firing is carried out by the ZIF-121 installation of the PK-2 complex of the aircraft carrier Vikramaditya, project 11430, photo - 2012-2013 (http://www.militaryphotos.net).

Launcher ZIF-121 of the PK-2 complex on the large anti-submarine ship "Vice-Admiral Kulakov" of project 1155, Northern Fleet of the Russian Navy, Severomorsk, March 29, 2011 (photo by Denis Mokrushin, http://twower.livejournal.com/520535.html).

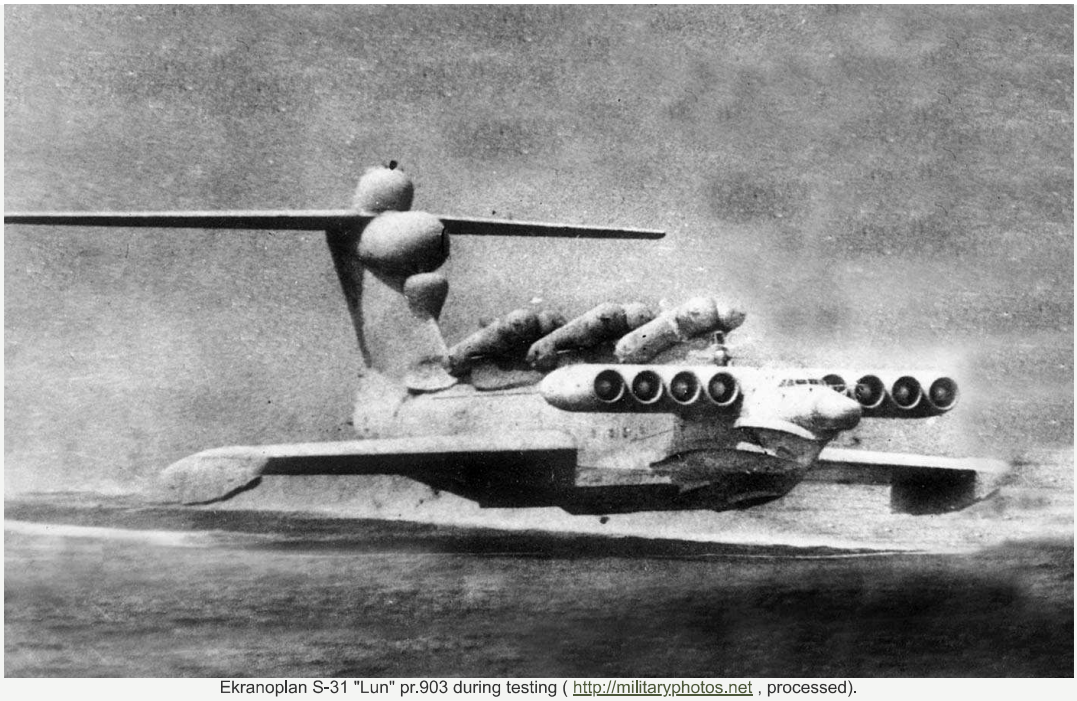
Launcher ZIF-121 of the PK-2 complex on the missile cruiser "Moskva" of project 1164, Black Sea Fleet of the Russian Navy, Sevastopol, July 21, 2011 (photo by Denis Mokrushin, http://twower.livejournal.com/623265.html).

Author: DIMMI Created: 07.03.2009 19:51:03 Comments: 3 READ THE FULL ARTICLE

pr.903 Lun

DATA AS OF 2012 (standard replenishment)
pr.903 "Lun"
★★★

Small missile ship (MRK), ekranoplan. Developed by the Central Design Bureau for Hydrofoil Vessels (SPK) of Chief Designer R.E. Alekseev (now - Central Design Bureau for Hydrofoil Vessels named after R.E. Alekseev). Chief Designer - V.N. Kirillovykh. Development of the missile ship began in the first half of the 1970s based on technical solutions tested on the KM ekranoplan . Construction of ekranoplans began with the laying of the S-31 ship in 1983 at the Volga plant (Chkalovsk, Nizhny Novgorod Region). A total of 8 ships were planned to be built in the series. The S-31 was launched on 16 July 1986 and in 1986 made its maiden flight on the Caspian Sea. Accepted into operational service by the Navy in December 1989. Was part of the Caspian Flotilla based in Kaspiysk. In fact, the ship ceased to be used in 1991. According to unconfirmed data, it was decommissioned from the Navy in 2003, but as of 2011 it was located in the city of Kaspiysk (as of May 20, 2008, confirmed by space photography).



Ekranoplan S-31 "Lun" pr.903 during testing (http://militaryphotos.net , processed).

Ekranoplan S-31 "Lun" pr.903 during testing (http://militaryphotos.net).

Author: DIMMI Created: 20.11.2011 15:00:28 Comments: 12 READ THE FULL ARTICLE

RAT-52

DATA AS OF 2011 (standard replenishment)
RAT-52
RAT-52M

Aircraft anti-ship high-altitude straight-running rocket torpedo. Development was started by the Resolution of the Council of Ministers of the USSR at the Research Institute-1 of the USSR Ministry of Agriculture and Machine Building in 1947. The prototype of the rocket torpedo was the RT-45 underwater rocket . After the development team was transferred to the Research Institute-2 of the USSR Ministry of Aviation Industry, the design of the torpedo was continued there under the D-44/A-2 theme. Chief Designer - G.Ya.Dillon, Deputy - V.P.Golikov (since 1958, after the death of G.Ya.Dillon, he was appointed Chief Designer). Sea trials of the experimental batch of RAT-52 torpedoes began in 1947. Several Tu-2T torpedo bombers adapted for the use of jet-propelled torpedoes with a suspension under the center section were produced for the tests by order of the USSR Ministry of Aviation Industry No. 782 of 14.12.1946. The experimental batch of RAT-52 torpedoes was produced by Plant No. 500 of the USSR Ministry of Aviation Industry (Moscow) in 1949-1950. The first torpedo launches from the Tu-2T were made in 1949. After that, the production of pre-production batches and serial production of RAT-52 torpedoes was transferred to Plant No. 466 "Krasny Oktyabr" (Leningrad). The RAT-52 torpedoes were equipped and factory tested at the plant's branches in Feodosia (Crimea) and Lisiy Nos (Leningrad Region). Factory tests were completed in 1950. State tests of the RAT-52 were conducted in 1952. The rocket torpedo was accepted into service on February 4, 1953. In 1953, the torpedo entered service with the Il-28T and Tu-14T torpedo bombers .

RAT-52 rocket torpedo suspension on Il-28T. 759th Torpedo Aviation Regiment, Khabarovo airfield, 19.05.1970 (photo - G.S. Shutov, http://www.bellabs.ru/Fotab/).

RAT-52 torpedo on the suspension unit under the Il-28T (Artemyev A. Wings over the sea. // Aviation and Cosmonautics. No. 10 / 2006).

Author: DIMMI Created: 18.01.2009 00:02:16 Comments: 1 READ THE FULL ARTICLE

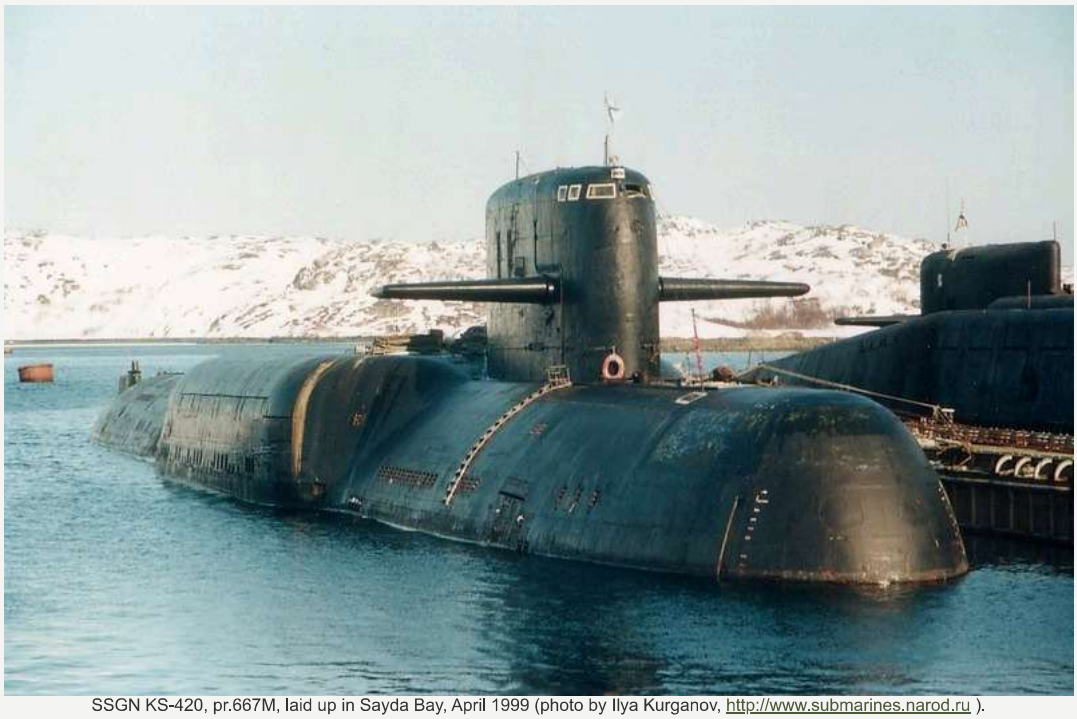
Project 667M Andromeda - YANKEE SIDECAR

DATA FOR 2013 (standard update)
pr.667M Andromeda - YANKEE SIDECAR
K-420
★★★

Nuclear submarine with cruise missiles (SSGN). At the suggestion of the Rubin submarine testing facility, it was decided to re-equip one of the Project 667A YANKEE SSBNs from among those being withdrawn from the strategic forces in accordance with the SALT-1 Treaty in order to conduct tests of the 3K25 Meteorit-M missile system. The chief designer of Project 667M was O. Ya. Margolin, and from 1987, E. A. Gorigledzhan. It was assumed that after the tests, the SSGN would be used as a regular combat unit of the Fleet. The technical design for the conversion according to Project 667M Andromeda was developed by LPMB Rubin in the first quarter of 1979. The conversion of the boat was officially started on September 25, 1979. The boat was delivered to the Sevmash PO slipway (Severodvinsk) on June 18, 1980. The converted boat was launched on October 15, 1982. Mooring and factory sea trials were passed from November 1, 1982 to August 4, 1983. State trials of the boat were held from August 16 to November 1, 1983. These trials were conducted without testing the missile weapon system.

Flight design tests of the missile complex began on the K-420 SSGN on December 27, 1983. Two more launches of the flight design program were carried out on November 6, 1984 and in 1986. Joint state tests of the carrier (K-420 SSGN) and the Meteorit-M cruise missile began in 1988. Four launches were conducted from a land-based test stand and three launches from a submarine. The ratio of successful to unsuccessful launches did not change (approximately 50 to 50). A total of 50 launches were conducted from land-based and submersible test stands and from a submarine during the tests. In 1989, taking into account the test results, the development of the sea-based version of the complex was terminated (December 15, 1989). The equipment of the complex was partially removed from the SSGN and the boat entered service with the USSR Navy in 1990 as a torpedo submarine.

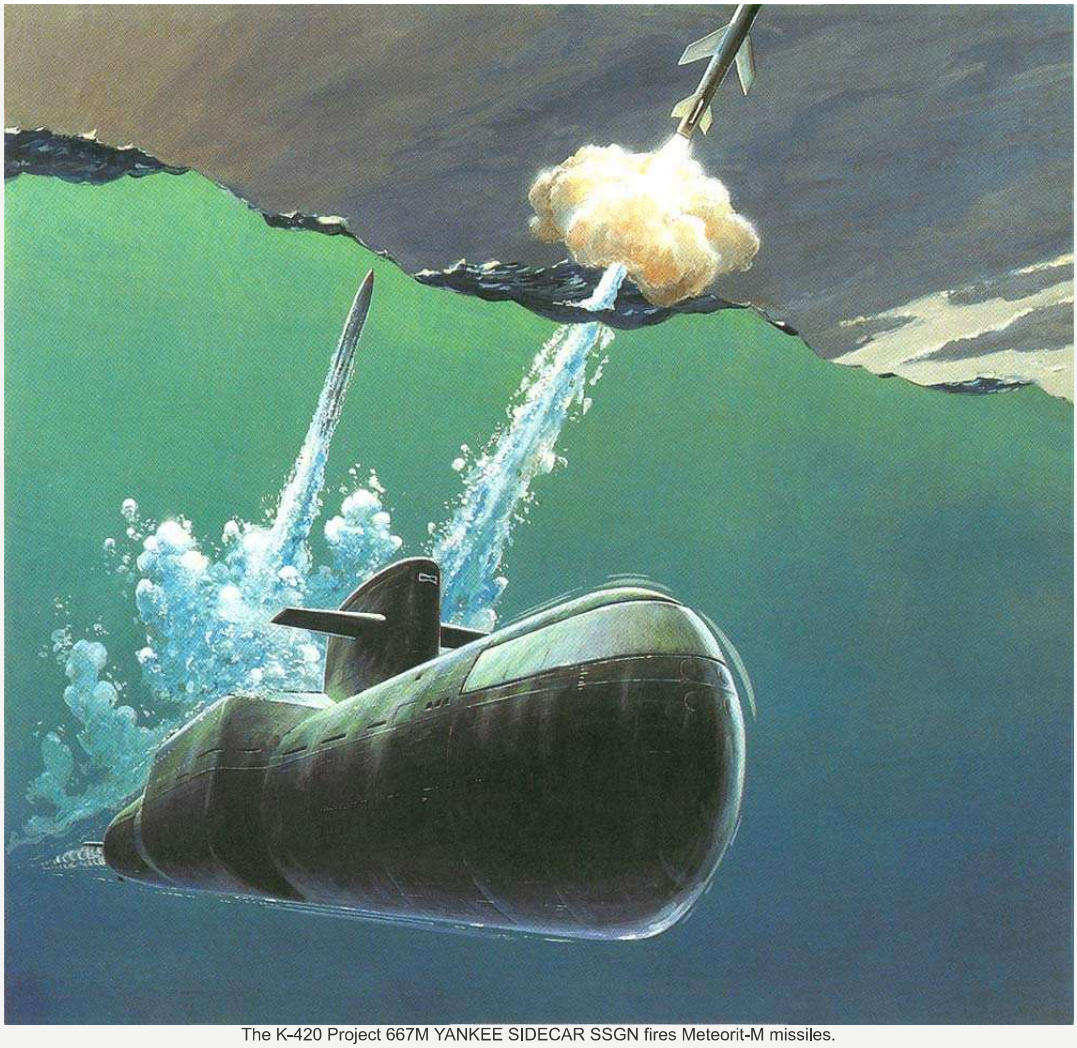
SSGN K-420, pr.667M YANKEE SIDECAR, photo probably taken during sea trials in 1983 (http://www.ckb-rubin.ru).



SSGN KS-420, pr.667M, laid up in Sayda Bay, April 1999 (photo by Ilya Kurganov, http://www.submarines.narod.ru).

SSGN K-420, pr.667M, Sayda-Guba, 24th sub of the 3rd flotilla of the Northern Fleet (photo from the archive of user matelot, http://forums.airbase.ru).

Far right - SSGN KS-420, Sayda-Guba, 24th sub of the 3rd flotilla of the Northern Fleet (photo from the archive of Hitroff, http://www.sukhoi.ru/forum).



The K-420 Project 667M YANKEE SIDECAR SSGN fires Meteorit-M missiles.
Illustration from the Pentagon publication Soviet MilitaryPower, 1987.

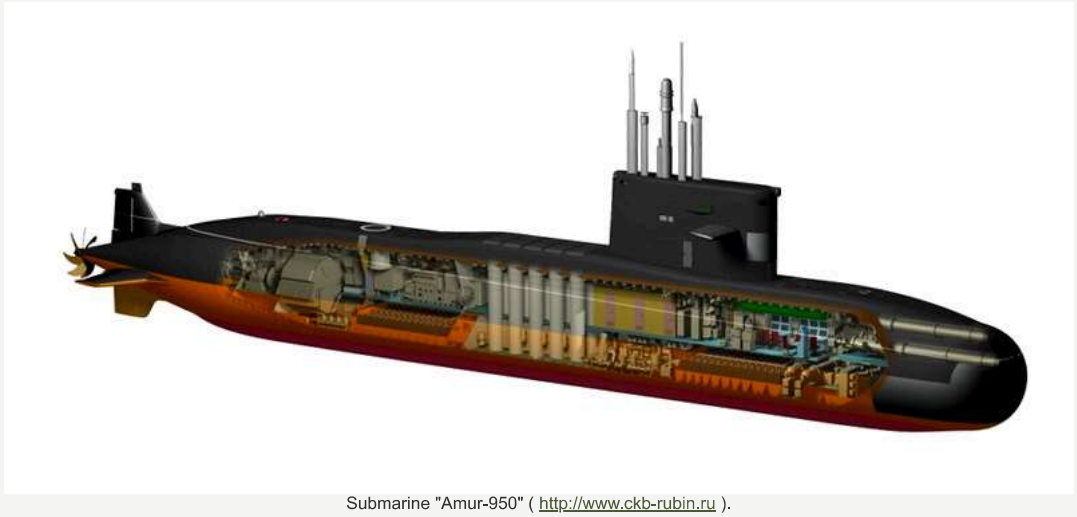
Author: DIMMI Created: 13.03.2013 23:04:18 Comments: 26 READ THE FULL ARTICLE

Amur-950 - AMUR

DATA FOR 2013 (standard replenishment)
"Amur-950" - AMUR

A project for a family of export non-nuclear submarines with unified design solutions. The project is being developed by the Rubin Central Design Bureau of Marine Engineering (chief designer, probably Yu.N.Kormilitsyn) in parallel with and based on the technical solutions of the Amur-1650 project / project 677E . Data from advertising materials of the Rubin Central Design Bureau of Marine Engineering.

Submarine "Amur-950" (http://www.ckb-rubin.ru).



Submarine "Amur-950" (http://www.ckb-rubin.ru).

Author: DIMMI Created: 11.03.2010 23:51:56 Comments: 1 READ THE FULL ARTICLE

APR-2 Hawk

DATA AS OF 2011 (standard replenishment)
APR-2 "Yastreb" / "Yastreb-M"
APR-2E "Yastreb-E"

Aircraft anti-submarine rocket torpedo. Developed by a cooperation of enterprises headed by GNPP "Region" (NIII, Tomsk NIIEM, Leningrad Research Institute "Poisk", Design Bureau of the Petrovsky Plant, Perm NPO named after Kirov, Moscow Research Institute "Kvant") on the basis of APR-1 . Chief Designer M. Lisichko. Sea trials of the torpedo began in 1969. State trials of the torpedo with the "Yastreb-M" control system were completed in 1976. In the same year, the torpedo under the name APR-2 was accepted into service. The first mention of the APR-2 in the press - 1992.

APR-2 torpedo at the military equipment exhibition at Knevichi airfield, Far East, April 9, 2012 (http://quick-spinch.livejournal.com , http://bulat-dragon.livejournal.com).

APR-2 air-launched anti-submarine missile (http://www.airwar.ru).

APR-2 "Yastreb-M" air-launched rocket torpedo. Elizovo airfield, Kamchatka, Air Force Day, August 15, 2010 (photo by A.A. Piragis, http://www.fotopetropavlovsk.ru)

Author: DIMMI Created: 18.01.2009 00:39:26 Comments: 1 READ THE FULL ARTICLE

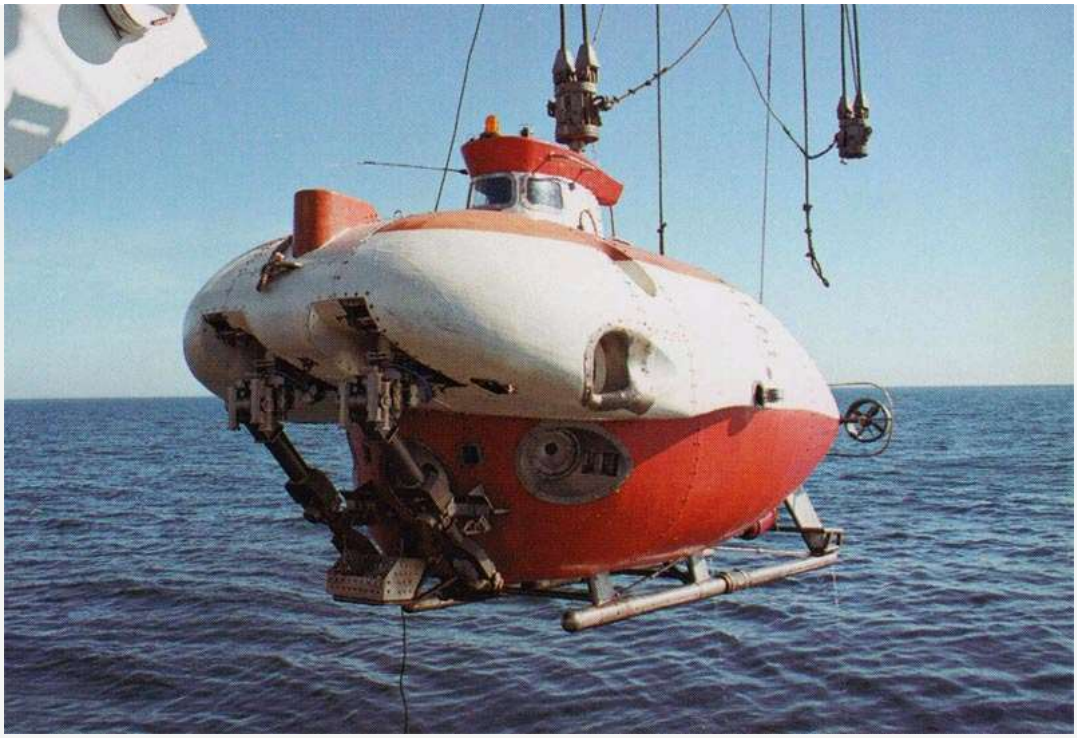
Project 16810 Rus / Project 16811 Consul

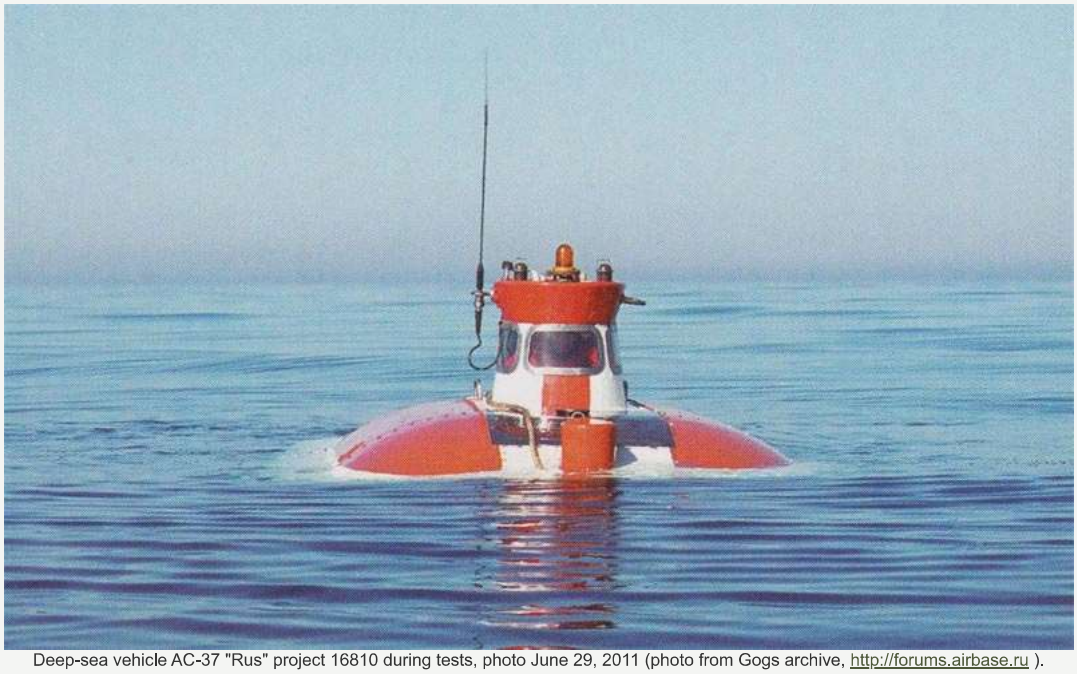
DATA FOR 2011 (standard update)
Project 16810 "Rus"
Project 16811 "Consul"

Manned self-propelled deep-sea underwater vehicle / rank 3 ship - autonomous deep-sea vehicle. The vehicle design was developed by SPMBM "Malakhit" (St. Petersburg). The design of the deep-sea vehicle according to the assignment of the USSR Navy and designed for diving to a depth of 6000 m according to Project 16810 was started in 1984 by SPMBM "Malakhit" under the supervision of Chief Designer V.G.Markov (since 1993 - E.M.Razumikhin). The following companies took part in the design of the vehicle: Central Research Institute of Structural Materials "Prometey", NPO "Vint", Central Research Institute "Aurora", Central Research Institute "Morfizpribor", NPO "Nord", NPO "Proletarsky Zavod" and NPO "Elektrotekhnika". The technical design of the apparatus of project 18810 was developed by order of the USSR Navy under the supervision of V.G. Markov in 1987. At the same time, a design of the apparatus with improved performance characteristics was proposed (future project 16811). In 1989, the working design documentation for the adjusted project 16810 was released. In 1989, the marine geological exploration project was also adjusted to the requirements of the USSR Maritime Register and the working design documentation for project 16811 was released. The customer of the second apparatus (project 16811 "Consul") until 1992 was the USSR Ministry of Geology, after 1992 - Rosnedra.

Preparations for the construction of apparatuses of project 16810 and project 16811 began at the Admiralty Shipyards in 1989 and in 1991-1992, respectively. The official keel laying of the AS-37 Rus', project 16810, apparatus took place on June 1, 1992, in workshop No. 12 (SSP-125 - deep-sea apparatus section) of the Admiralty Shipyards. Testing of the AS-37 Rus' apparatus began in 1998, and it was launched on May 20, 1999. In 2001, the apparatus made its first dives in the Baltic Sea. The factory sea trials and state trials of the Rus' apparatus were conducted in the Baltic Sea, which did not allow for tests with a dive to the maximum depth. During the state trials, an emergency ascent of the apparatus was checked with the release of the shunting ballast bunker cover (iron shot) and the release of the device for setting it on the base with trim weights. Such tests were conducted for the first time. The State Acceptance Committee accepted the experimental autonomous deep-sea vehicle Rus for trial operation in the Russian Navy in the Baltic Sea with a limitation on the diving depth achieved during state trials. In accordance with the decision of the Commander-in-Chief of the Navy and the Director of the Russian Agency for Shipbuilding No. 743/5/1245 of November 3, 2000, the experimental vehicle was not submerged to a depth of 6,000 m. The same decision accepted the State Commission's proposal to perform modernization work on both the Rus vehicle and the Project 141 carrier vessel, followed by deep-sea dives to 3,000 m and 6,000 m in the Atlantic Ocean.

In 2001-2005, the AS-37 Rus vehicle underwent modernization, bringing its capabilities closer to those of Project 16811. In 2005,The Rus submersible dived to a depth of 3600 m (*source: Burilichev A., interview*). After a deep-sea dive in December 2006 near the Azores, the device was accepted into service by the Russian Navy in February 2007.





Deep-sea vehicle AC-37 "Rus" project 16810 during tests, photo June 29, 2011 (photo from Gogs archive, http://forums.airbase.ru).

Deep-sea vehicle AC-39 "Consul" project 16811 during tests, photo 2010-2011 (photo from Gogs archive, http://forums.airbase.ru).

Author: DIMMI Created: 22.09.2011 12:34:09 Comments: 3 READ THE FULL ARTICLE

MG-74 Corundum

DATA AS OF 2013 (standard replenishment)
MG-74 / MG-74E "Korund-2"
MG-74M / MG-74ME "Korund-2M"
★★★

Self-propelled multipurpose hydroacoustic countermeasure device. Probably developed by the Central Research Institute "Gidropribor" and accepted into service in 1974. The devices were serially produced by the Dvigatel Plant (Leningrad, now St. Petersburg). In its external contours, main components, power plant, motion control system, auxiliary systems and devices, and elements of docking with the torpedo tube, the device is similar to an electric torpedo.

Purpose of the device:
- suppression of receiving paths of hydroacoustic means of anti-submarine forces;
- suppression of torpedo homing systems;
- distraction of anti-submarine forces in false directions;
- diverting homing torpedoes from submarines.

In suppression mode, the devices emit powerful hydroacoustic interference; in trap mode, they imitate running noises and submarine echo signals, maneuvering according to a program corresponding to the submarine's behavior when evading anti-submarine forces and homing torpedoes.

Hydroacoustic countermeasure device MG-74 (http://www.kremalera.narod.ru).

Schematic diagram of the hydroacoustic countermeasure device MG-74ME (http://milparade.com).

Author: DIMMI Created: 06.11.2011 20:25:12 Comments: 1 READ THE FULL ARTICLE

D-6 - SS-N-4 SARK (first)

DATA AS OF 2013 (standard replenishment)
D-6 complex / R product, missile "variant B" / "variant C" - SS-N-4 SARK (the first missile with this name) **/ SS-N-5 SERB** (erroneous) Submarine-launched ballistic missile (SLBM). Development of the D-6 complex with the first solid-fuel domestic SLBM was started by Resolution of the USSR Council of Ministers No. 1032-492 of September 5, 1958 and was carried out under the same tactical and technical requirements that were imposed on the D-4 complex with the R-21 missile . Lead developer - TsKB-7 GKOT (future Design Bureau "Arsenal", Leningrad), Chief Designer - P.A. Tyurin. The Council of Ministers decree assigned design work on the placement of the D-6 complex on submarines - on the Project 629 SSBN TsKB-16 (Chief Designer N.N. Isanin) and on the Project 658 SSBN TsKB-18 (Chief Designer I.B. Mikhailov). The creation of the control system for the complex as a whole was assigned to NII-592 GKRE (Chief Designer - N.A. Semikhatov), gyroscopic instruments and shipboard computing devices - NII-49 GKS (Chief Designer - V.P. Arefyev), on-board electrical equipment and current sources - NII-627 and VNIIT METP (Chief Designers - A.G. Iosifyan and N.S. Lidorenko). The creation of the Nylon fuel for the rocket and the development of the industrial technology for its production were entrusted to GIPH and NII-125 MPH (scientific directors - V.S. Shpak and B.P. Zhukov). The development of the ship launcher was carried out by TsKB-34 GKOT (chief designer - E.G. Rudyak). The complex of ground docking, lifting and transport and auxiliary equipment was designed by GSKB (chief - Petrov). The scientific directors of the development were: for the rocket - S.P. Korolev (OKB-1 GKOT), for the rocket control system - N.A. Pilyugin (NII-885 GKRE), for engines using Nylon fuel - Yu.A. Pobedonostsev (NIKHTI), for polymer materials - V.A. Kargin (Institute of Petrochemical Synthesis of the USSR Academy of Sciences). Also participating in the development of the complex were TsNII-45, LVMI, NII-13, LTI, NII-6, military unit 31303, NII-88, NII-137, Plant No. 6, Orekhovo-Zuyevo Plant "Karbonit", SKB-699, Plant No. 686, OKB-686, Plant No. 669, SKB-699, VNIISK, NIIPP, NII-2, KB-2 of Plant No. 81, Combine No. 101 and others.
★★★

Models of the D-6 missile system at the parade on Red Square in Moscow on May 1, 1963 (photo - Stan Wayman / LIFE, http://avaxnews.net).

The same missile - the photo was taken literally a second later by another correspondent. Models of the D-6 missile system at the parade on Red Square in Moscow on May 1, 1963 (photo - AP, http://www.wsbtv.com).

Models of the D-6 missile system at one of the parades in Leningrad, 1960s (photo from the archive of user dimon-13, http://militaryrussia.ru/forum/).

Author: DIMMI Created: 03.12.2012 21:17:34 Comments: 36 READ THE FULL ARTICLE

pr.865 - LOSOS

DATA AS OF 2011 (standard replenishment)
pr.865 "Piranha" - LOSOS

Small special submarine ("MS"). The USSR Navy's technical specifications for the creation of a special small submarine were issued to the Malakhit Design Bureau in 1976 (chief designer - L.V. Chernopyatov, later - Yu.K. Mineev). In 1984, Yu.K. Mineev was appointed chief designer of the project and on July 15, 1984, the lead submarine MS-520 was laid down at the Leningrad Admiralty Association (launched on August 20, 1986). The second submarine MS-521 was laid down there on December 1, 1987. The factory's sea trials and later state trials of the submarine were conducted in the Baltic Sea with the submarine based in Paldiski (Estonia). The first submarine MS-520 was accepted by the Navy for a year of trial operation on December 30, 1988, the second - on December 25, 1990. Home base - Liepaja, Baltic Fleet. The boats were decommissioned from the Navy in 1999, but back in 1998 they were cut up for scrap metal in one of the shops of the Kronstadt Marine Plant.

Submarine MS-520 pr.865 "Piranha" - LOSOS on trials (Admiralty shipyards of the submarine fleet of Russia. St. Petersburg, "Gangut", 2003)

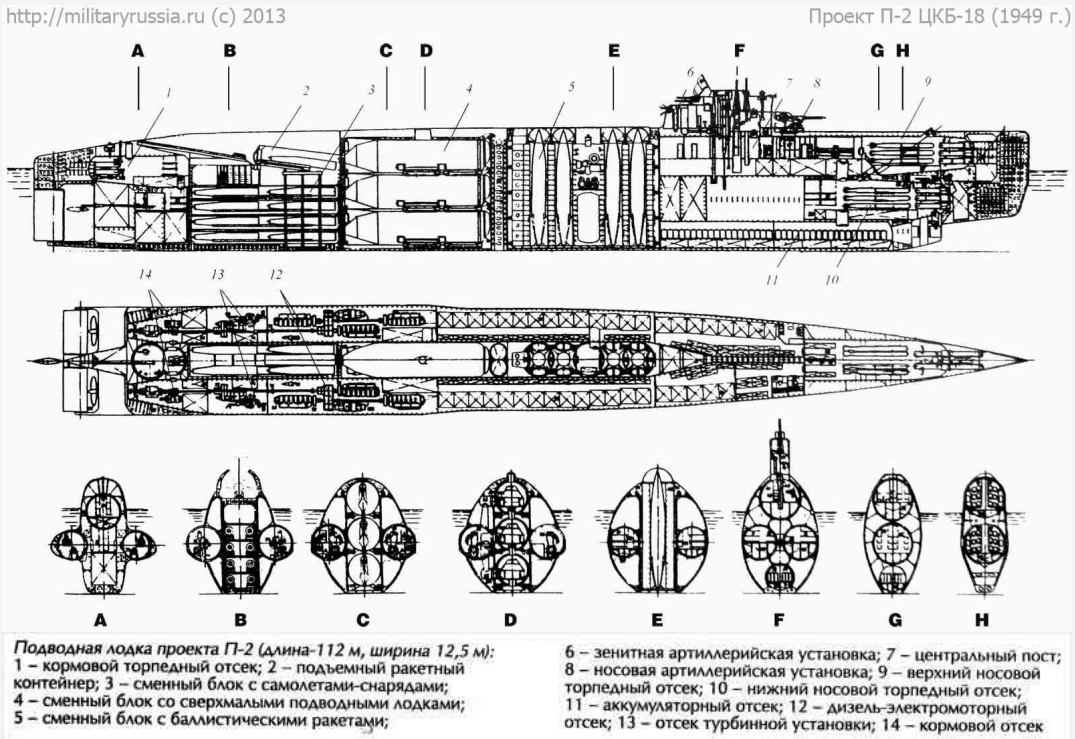
Author: DIMMI Created: 30.06.2009 22:46:23 Comments: 21 READ THE FULL ARTICLE

P-2 (project)

DATA FOR 2013 (standard update)
P-2
★★★

Diesel-electric submarine with ballistic and cruise missiles (project). Research development was carried out by TsKB-18 (now TsKB MT "Rubin") in 1949 on the instructions of the USSR Ministry of Shipbuilding Industry. Chief Designer - F.A. Kaverin. In total, several submarine layout options were developed at the pre-draft design stage, but usually only one option is considered in sources. Further development of the project was terminated.

The submarine was designed for different payload options with their combination. It was assumed that three modules with payload would be placed in the central penetrable volume of the boat. The maximum number of ballistic missiles (with the use of three modules) is 12 missiles, cruise missiles (similarly) - 51 missiles.



Layout of the P-2 submarine (processed drawing from Naval strategic missile systems. Moscow, "Military Parade", "Makeev State Research Center", 2011).

Author: DIMMI Created: 06.01.2013 22:43:26 Comments: 2 READ THE FULL ARTICLE

pr.1832 Poisk-2 - MODERN SEVER

DATA FOR 2012 (standard update)
Project 1832 "Poisk-2" - MODERN SEVER
AGA-6
AS-8
AS-24
AS-27
Project 1847 "Poisk-2S" (project)
★★★★

Manned self-propelled deep-sea underwater vehicle / deep-sea complex with a first-generation carrier vessel. The draft of the tactical and technical specifications for the creation of the vehicle was received by the Rubin Design Bureau in early 1966. The purpose of the vehicle is to conduct search and research work in the interests of the Navy at depths of the continental slope up to 2000 m. One of the purposes of such vehicles is additional search, classification and survey of sunken objects. Chief Designer - N.A. Klimov, Lead Designer for the pre-draft project - E.N. Shakhinin. Work on the pre-draft project was carried out from early 1966 in N.M. Klimov's group. In late 1966, the project was transferred to Chief Designer Yu.K. Sapozhkov, Deputies - G.G. Katsman, E.N. Shakhinin and M.N. Diomidov. By the end of 1966, the creation of a preliminary design in the version with liquid and solid lightweight fillers (see Design) was completed. The draft Resolution of the USSR Council of Ministers and the draft order of the USSR Ministry of Shipbuilding Industry for the working design were agreed upon by September 1967. In 1967, the creation of a preliminary design began.

Experimental deep-sea vehicle AGA-6. Balaklava, 1993 (photo from the archive of user diletant2010, http://forums.airbase.ru).

Deep-sea vehicle AS-8 "Poisk-2" pr.1832 during sea trials (photo from the archive of Gogs, http://forums.airbase.ru).

Deep-sea vehicle AS-24 "Poisk-2" pr.1832 (photo from the archive of Gogs, http://forums.airbase.ru).

Vehicle AS-27 "Poisk-2" in the hold of the rescue ship "Alagez", Pacific Fleet, 2010 (photo by Dmitry Kornilov, http://www.northlands.ru).

Author: DIMMI Created: 04.07.2011 12:24:45 Comments: 3 READ THE FULL ARTICLE

pr.940 - INDIA

DATA FOR 2009 (standard update)
pr.940 "Lenok" - INDIA

Large rescue diesel-electric submarine ("BS"). R & D was started by TsKB-112 (later renamed to TsKB "Lazurit") in 1964-1968 during the development of technical solutions for the rescue submarine. The decision of the USSR Council of Ministers on the design and construction was made on September 20, 1967. The design was carried out using the experience of testing and trial operation of the rescue submarine of Project 666. The technical design of the submarine "Lenok" was developed in 1969 (without a preliminary design, chief designer B.A. Leontyev). Working drawings of the submarine of Project 940 were ready by 1972 and work began on preparing for the construction of the submarine at the Leninskogo Komsomol Plant (Komsomolsk-on-Amur). The lead submarine BS-486 (factory No. 194) was laid down on February 22, 1974, launched on September 7, 1975 and delivered to the Navy on January 21, 1976. The second submarine BS-257 (factory No. 195) was laid down on February 23, 1978, launched on May 27, 1979 and delivered to the Navy on September 1, 1979. The lead submarine was transferred for trial operation (1976-1978) to the Navy on February 9, 1976 to the Pacific Fleet (the second submarine BS-257 was transferred to the Northern Fleet).

Rescue submarine pr.940 "Lenok" INDIA with rescue apparatus pr.1855 "Priz". Probably this is BS-486, next to submarine pr.641B TANGO , 1998 (photo - Ilya Kurganov, http://deepstorm.ru , http://tsushima.su/forums).

Author: DIMMI Created: 26.06.2009 23:45:21 Comments: 5 READ THE FULL ARTICLE

130 mm installation A-192 / A-192M

DATA AS OF 2012 (standard replenishment)
Complex A-192-5P-10 "Armath-Puma", installation A-192"Armath"
Complex A-192-5P-10E "Armath-Puma", installation A-192E
Complex A-192M-5P-10 "Armat-Puma", installation A-192M
★★

1 x 130 mm universal artillery mount / universal naval artillery system. R & D was conducted by the Design Bureau of the Arsenal Production Association since the late 1980s, chief designer - Yu.P. Prokofiev. Proving ground tests of the prototype at Rzhevka were conducted in the early 1990s. First mentioned in the press - the Krasnaya Zvezda newspaper for 19.06.1992. As of spring 2011, the prototype is being tested. In autumn 2011, the media reported that the A-192 mount was being tested at the Rzhevka testing ground, which is planned to be installed on the lead frigate of Project 22350 Sergey Gorshkov - according to other sources, this is the A-192M mount, which is planned to be launched into serial production. As of 2011, production of the mount is planned to be carried out at PO Arsenal. Testing of the installation is planned to be completed in 2012 (plans for spring 2011). As of early October 2012, the installation has not been delivered for installation on the lead ship of the project and the media reports that the development of the Armat-Puma R&D project has been terminated in the summer of 2012. Development of a new model, the Kartaun R&D project, has begun to replace the installation.

By default, the installation data are A-192.

Model of the A-192 "Armata" installation, 2007-2010 (photo ABL22, http://military.tomsk.ru/forum).

Author: DIMMI Created: 28.02.2009 02:10:11 Comments: 3 READ THE FULL ARTICLE

pr.1143 Krechet - KURIL / KIEV

DATA FOR 2012 (standard replenishment)
pr.1143 "Krechet" - KURIL / KIEV
"Kiev"
"Minsk"
pr.1143M / pr.11433
"Novorossiysk"
★★★★

Heavy aircraft-carrying cruiser (TAKR) / anti-submarine cruiser. Developed as a development of the corrected project of the anti-submarine cruiser pr.1123M in Nevskoe Design Bureau, chief designer A.V. Marinich. The development of the adjusted project of the cruiser of the project 1123M for the basing of the VTOL aircraft of the Yak-36 type began in 1968. The keel of the cruiser of the project 1123M "Kiev" was laid on February 20, 1968 and by the Resolution of the Council of Ministers of the USSR No. 685-521 of September 2, 1968 the construction was stopped and it was decided to build the cruiser "Kiev" on the slipway No. 0 of the shipyard in Nikolaev according to the new project 1143. The resolution prescribed to issue the technical specifications for the new ship (to the USSR Ministry of Defense) within a month, to develop a draft design in 1968 and a technical design in 1969 (to the USSR Ministry of Shipbuilding Industry and the Nevsky Design Bureau).

Aircraft carrier "Minsk" - entertainment and tourist center in Shenzhen, China, 2010 (http://forums.airbase.ru).

Aircraft carrier "Minsk" pr.1143, 1982-1983 (photo from the Cabal archive, http://militaryphotos.net).

Aircraft carrier pr.11433 "Novorossiysk" (http://www.defenseimagery.mil)

Author: DIMMI Created: 03.06.2010 00:51:46 Comments: 38 READ THE FULL ARTICLE

130mm SM-62 installation

DATA FOR 2012 (standard update)
SM-62

130-mm twin-gun automatic universal naval artillery mount. Development was carried out by TsKB-34 (Leningrad) on the basis of the SM-2 mount . It was planned to be installed on the cruisers of Project 68bis (except for the first 4 units) being completed under Project 67, and also according to the shipbuilding program for 1956-1965 it was planned to install on the destroyer of the corrected Project 56 (starting with the 31st ship of the series), as well as (after the refusal to build a large series of destroyers of Project 56) on destroyers of the basic Project 57. The technical design of the mount was completed by 1955. A pilot sample(s) of the mount was(were) built, tests were probably conducted. Due to the passion of the leadership of the Country and the Navy for missile weapons, development was stopped in 1956.

Author: DIMMI Created: 22.01.2009 22:44:11 Comments: 10 READ THE FULL ARTICLE

Pantsir-M / Palitsa

DATA AS OF 2012 (in progress)
Complex "Pantsir-M" / "Palitsa"
Complex "Pantsir-ME" / "Pantsir-ME"

Anti-aircraft missile and artillery system. Developed by the Instrument-making Design Bureau (hereinafter referred to as KBP, Tula), the chief designer is probably Alexander Rybas. The Palitsa air defense missile and artillery system is being created using the missile and electronic components of the Pantsir-S1 air defense missile and artillery system . The air defense missile and artillery system is intended to arm ships from corvettes to cruisers. According to unconfirmed reports, work on creating a prototype has been underway since 2010. As of 2011, the system is being developed for the Russian Navy. A model of the Pantsir-ME system was shown at the IMDS-2011 maritime show in St. Petersburg, which is a Kortik-M air defense missile system with elements of the Pantsir-S1 air defense missile and artillery system radar equipment. The performance characteristics of the export modification of the air defense missile system are indicated by default.

Model of the Pantsir-ME air defense missile system at the MVSM-2011 exhibition, St. Petersburg (photo - muxel, http://bmpd.livejournal.com).

Author: DIMMI Created: 21.06.2012 12:23:13 Comments: 2 READ THE FULL ARTICLE

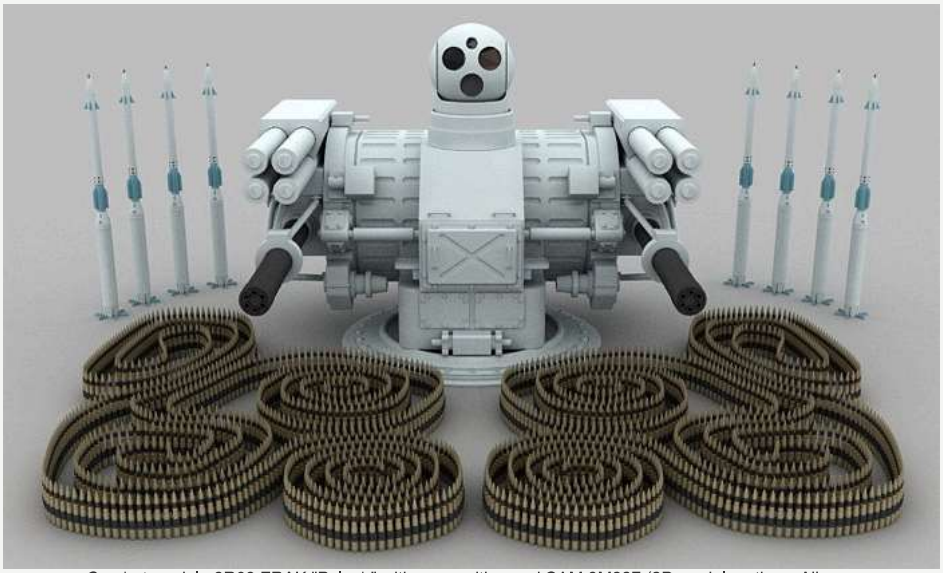
Complex 3M89 Palash / Palma

DATA AS OF 2010 (standard replenishment)
Complex 3M89 "Palash", combat module 3R89 / A-289, missile 9M337 "Sosna-R"
Complex 3M89E "Palma"
★★★★

Anti-aircraft missile and artillery system. It was developed at least since 1994 by the TsNII Tochmash (Nudelman Precision Engineering Design Bureau). The system was developed as a lighter modular replacement for the Kortik SAM system. A competing project is the Kortik-M / Kortik-MO SAM system developed by KBP. The system is an analogue of the Kortik SAM system with two six-barreled AO-18 automatic guns and is supposed to carry two packages of four SAMs in the TPK. According to 1997 data, the R & D of the promising Palma SAM system is being conducted by the Tochmash Design Bureau jointly with the Ametist Design Bureau. Production is supposed to be located at the Tulamashzavod JSC. Field tests of the Palash SAM system were conducted until the fall of 2005 at the Feodosia Proving Ground, Object 30 (Feodosia, Crimea). Upon their completion, the A-289 ZRAK combat module was transported to Shipyard No. 13 in Sevastopol, where it was installed for testing on the R-60 missile boat. The tests continued until 2007. In December 2007, the Palash ZRAK was accepted into service with the Russian Navy for trial operation. Due to the developer's failure to meet some of the requirements of the technical specifications, it is highly likely that the Kortik-M system will be accepted into service.

The 3S89 installation of the 3R89 combat module includes two six-barreled 30 mm AO-18KD machine guns with an increased muzzle velocity of the projectile (probably due to a decrease in the weight of the projectile) and two blocks of four Sosna-R 9M337 missile launchers. The maximum configuration of the Palma complex (export version) according to the project includes 4 combat modules, a circular scanning and target designation radar, and a gyrostabilization system. According to 2010 data, the 9M337 SAMs were not tested as part of the Palash SAM system - the modification of the SAM system to carry SAMs was supposed to be part of the work on the Palma SAM system for a foreign customer. The SAMs in the photographs are either photomontages or mock-ups. The Palma SAM system is the export name of the Palash SAM system. By default, the data is for the Palash SAM system.

Special thanks to Warman (http://tsushima.su/forums/) for assistance in working on the material and Allocer for the graphic work.



Combat module 3R89 ZRAK "Palash" with ammunition and SAM 9M337 (3D model, author - Allocer, http://allocer.nxt.ru/models/military/palash/palash.htm).

Author: DIMMI Created: 17.01.2009 00:49:04 Comments: 52 READ THE FULL ARTICLE

1 2 3 ... 6 7 **8** 9 10 ... 15 16 17